Merritt Parkway. Main Street/Route 25 Bridge Spanning the Merritt Parkway at the 30.73 mile mark Trumbull Fairfield County Connecticut HAER No. CT-118

HAER CONN, 1-TRUM,

PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

Historic American Engineering Record National Park Service U.S. Department of the Interior P.O. Box 37127 Washington, D.C. 20013-7127

HAGR CONN, 1-TRUM, 6-(Page 1)

HISTORIC AMERICAN ENGINEERING RECORD

Merritt Parkway, Main Street/ Route 25 Bridge

HAER No. CT-118

Location:

Spanning the Merritt Parkway at the 30.73 mile mark in Trumbull, Fairfield

County, Connecticut

UTM: 18.649100.4565845 Quad: Bridgeport, Connecticut

Construction Date:

1936

Engineer:

Connecticut Highway Department

Architect:

George L. Dunkelberger, of the Connecticut Highway Department, acted as head

architect for all Merritt Parkway bridges.

Contractor:

Mariani Construction Company

New Haven, Connecticut

Present Owner:

Connecticut Department of Transportation

Wethersfield, Connecticut

Present Use:

Used by traffic on Main Street/Route 25 to cross the Merritt Parkway

Significance:

The bridges of the Merritt Parkway were predominately inspired by the Art Deco and Art Moderne architectural styles of the 1930s. Experimental forming techniques were employed to create the ornamental characteristics of the bridges. This, combined with the philosophy of incorporating architecture into bridge

design and the individuality of each structure, makes them distinctive.

Historians:

Todd Thibodeau, HABS/HAER Historian

Corinne Smith, HAER Engineer

August 1992

For more detailed information on the Merritt Parkway, refer to the Merritt Parkway History Report, HAER No. CT-63.

LOCAL HISTORY

In 1668, there were only five settlers living beyond the two-mile limit of the Stratford meeting house. Shortly after this date, the land north of Stratford was surveyed, laid out and assigned to individuals. It is unknown if anyone settled there before Abraham Nichols and his family arrived from Stratford in 1690. Other families soon followed, creating a district known as Nichols Farms.¹

As the population increased, the desire for a local church and government became evident. In 1725, Nichols Farms residents petitioned the General Court for village privileges and a committee was named to view their case. The General Assembly acted in favor of their petition and in October 1725 the Assembly granted the residents of Nichols Farms the "liberty of village privileges," as the Society of Unity. Unity was still a part of Stratford, but could maintain its own meeting house and school, through a local tax.²

At the same time, residents from Fairfield were clearing lands west of Unity. This area came to be known as the Long Hill region and faced many of the same problems as Nichols Farms. These settlers were forced to pay for a church and school that were too far away for them to use.³

In 1740 the General Assembly granted the Long Hill region an exemption from paying taxes for the school and meeting house in Stratfield, between December and mid March. Furthermore, Long Hill was allowed to develop its own meeting house during these months. Thus, the Winter Society of Long Hill was created; this arrangement continued for four years.

¹<u>History of Trumbull: Dodrasquicentennial, 1797-1972</u>, (Trumbull: Trumbull Historical Society, Inc., 1972), 25.

History of Trumbull: Dodrasquicentennial, 26.

³David A. Cronin, "History of Trumbull, Connecticut," <u>Historical Sketches of Trumbull</u>, <u>Connecticut: Tercentury Celebration</u>, (Trumbull: The Trumbull Historical Committee, 1935), 5.

In 1744, the parishes of Unity and Long Hill, only five miles apart, were consolidated into the Society of North Stratford. The new society functioned in virtually the same manor as the Unity parish. As they were now allowed to manage their own religious and educational affairs, residents became anxious to obtain complete independence from Stratford. For more than fifty years North Stratford sought to become an individual township. In October 1797, the General Assembly passed the "Trumbull Bill" establishing the Society of North Stratford as the town of Trumbull.⁴

The Boston Post Road and the main line of the railroad both passed to the south of Trumbull, isolating the community as a rural farming region until the completion of the Merritt Parkway in 1940. Trumbull was the location the Connecticut Highway Department's main field office during the construction of the Merritt Parkway.

BRIDGE CONSTRUCTION HISTORY

Historically, Main Street/Newtown Turnpike was the primary link between the agricultural region around Newtown and the market at Bridgeport. The Osborn-Barnes Construction Company of Danbury, CT, received the contract to grade the Merritt Parkway from the Black Rock Turnpike, in Fairfield, to Main Street/Route 25, in Trumbull (CONDOT project #180-52). While the Main Street/Route 25 Bridge is located within this section of the Merritt, the grade separation and bridge contract went to the Mariani Construction Company of New Haven, CT (CONDOT project #180-19). The bridge cost \$38,414 and was completed in 1936. The paving work for this region of the Merritt also extended from the Black

History of Trumbull: Dodrasquicentennial, 28.

⁵Contract Card File, Map File and Engineering Records Department, Connecticut Department of Transportation, Wethersfield, CT.

Rock Turnpike to Main Street/Route 25. This contract was awarded to the New Haven Company of New Haven, CT (CONDOT project #180-102). In 1991, the Main Street/Route 25 Bridge had all loose and spalling concrete removed and patched (CONDOT project #144-158).6

BRIDGE DESCRIPTION

The Main Street Bridge is a single-span, reinforced-concrete, barrel-type rigid-frame bridge with a clear roadway of 60' at a 1.35 percent grade. The frame spans 64'-7" over the Merritt Parkway at a skew of 12°-41'-30", with a clear roadway of 60'. Reinforced-concrete wing walls form the approach for the underpass. The south wing walls are parallel to the road, and the north wing walls curve away from the road.

The rigid-frame design allows the engineer to decrease the structural material at the center of the span, thus forming an arched opening. (See the Merritt Parkway History Report, HAER No. CT-63, for a more detailed description of the rigid-frame.) The arch of this bridge is elliptical. From the springline the arch rises almost 90° in a 1'-3" radius. Then the intrados of the span rises 4'-1-3/4" to the crown. The extrados rises only a few inches from the knee to the crown. The frame thickness at the crown is 22". The outside of the knee is squared with a notch. The frame leg thickness increases from 26" at the base to 56" at the knee. The exposed face of the legs remains vertical, and the hidden face slopes away from the roadway. The minimum clearance provided at the edge of the pavement is 14'-3".

The surfaces of the bridge have been formed to imitate several different materials. The wing walls look like overlapping wooden clapboards, and the arched span looks like stone voussoirs.

Presently, the spandrels are spalling badly, especially at the voussoirs. The under side of the bridge is

⁶Main Street/Route 25, DOT #748; Bridge Maintenance File, Engineering Department, Connecticut Department of Transportation, Newington, CT.

smooth concrete except for four protruding arched panels on each exposed frame leg. The frame of the panel has a rubbed finish, and the panel itself has a tooled finish that exposes the dark aggregate in the concrete. The handrail across the bridge and the wing walls resembles clapboards alternating with balustrades.

BIBLIOGRAPHY

- Beach, E. Merrill. Trumbull: Church and Town, A History of the Colonial Town of Trumbull and of its Church. Trumbull: The Trumbull Historical Society, Inc., 1972.
- Cronin, David A. "History of Trumbull, Connecticut." <u>Historical Sketches of Trumbull, Connecticut:</u> <u>Tercentury Celebration</u>. Trumbull: Trumbull Historical Committee, 1935.
- ----- <u>History of Trumbull: Dodrasquicentennial, 1797-1972</u>. Trumbull: The Trumbull Historical Society, Inc., 1972.
- ----- Contract Card File. Map File and Engineering Records Department, Connecticut Department of Transportation: Wethersfield, CT. This includes construction drawings, copies of which are in the HAER field records.
- ----- Bridge Maintenance File. Engineering Department, Connecticut Department of Transportation: Newington, CT.

PROJECT INFORMATION

This recording project was undertaken by the Historic American Buildings Survey and the Historic American Engineering Record (HABS/HAER) Division of the National Park Service, Robert J. Kapsch, Chief. The Merritt Parkway recording project was sponsored and funded by the Connecticut Department of Transportation (ConnDot) and the Federal Highway Administration.

The fieldwork, measured drawings, historical reports and photographs were prepared under the general direction of Eric N. DeLony, HAER Chief, and Sara Amy Leach, HABS Historian.

The recording team consisted of Jacqueline A. Salame (Columbia University), architect and field supervisor; Mary Elizabeth Clark (Pratt Institute) and B. Devon Perkins (Yale University), architectural technicians; Joanne McAllister-Hewlings (US/ICOMOS-Great Britain, University of Sheffield), lands cape architect; Corinne Smith (Cornell University), engineer; Gabrielle M. Esperdy (City University of New York) and Todd Thibodeau (Arizona State University), historians; and Jet Lowe, HAER photographer.